48

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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/685,821	10/15/2003	Mark Steven Boggs	2002P20758US01	5269

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Siemens Corporation
Intellectual Property Department
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EXAMINER	
CHOE, YONG J	
ART UNIT	**PAPER NUMBER**
2185	

SHORTENED STATUTORY PERIOD OF RESPONSE	MAIL DATE	DELIVERY MODE
3 MONTHS	12/27/2006	PAPER

Please find below and/or attached an Office communication concerning this application or proceeding.

If NO period for reply is specified above, the maximum statutory period will apply and will expire 6 MONTHS from the mailing date of this communication.

Office Action Summary	**Application No.** 10/685,821	**Applicant(s)** BOGGS ET AL.
	Examiner Yong Choe	**Art Unit** 2185

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE *3* MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

1)☒ Responsive to communication(s) filed on *15 October 2003*.
2a)☐ This action is **FINAL**. 2b)☒ This action is non-final.
3)☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

4)☒ Claim(s) *1-36* is/are pending in the application.
4a) Of the above claim(s) _____ is/are withdrawn from consideration.
5)☐ Claim(s) _____ is/are allowed.
6)☒ Claim(s) *1-36* is/are rejected.
7)☐ Claim(s) _____ is/are objected to.
8)☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

9)☒ The specification is objected to by the Examiner.
10)☒ The drawing(s) filed on *15 October 2003* is/are: a)☒ accepted or b)☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
11)☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

12)☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
a)☐ All b)☐ Some * c)☐ None of:
1.☐ Certified copies of the priority documents have been received.
2.☐ Certified copies of the priority documents have been received in Application No. _____.
3.☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

1) ☒ Notice of References Cited (PTO-892)
2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
3) ☒ Information Disclosure Statement(s) (PTO/SB/08)
Paper No(s)/Mail Date *2/25/2005*.
4) ☐ Interview Summary (PTO-413)
Paper No(s)/Mail Date. _____ .
5) ☐ Notice of Informal Patent Application
6) ☐ Other: _____.

DETAILED ACTION

1. The instant application having Application No. 10/685,821 has a total of 36 claims pending in the application. There are 7 independent claims (e.g., claim 1,6,16, 21, 26, 35 and 36) and 29 dependent claims, all of which are ready for examination by the examiner.

Priority

2. As required by M.P.E.P. 201.14(c), acknowledgment is made of applicant's claim for priority based on an application filed on 10/15/2003.

Information Disclosure Statement

3. As required by M.P.E.P. 609 (C), the applicant's submission of the information Disclosure Statement dated 02/25/2005 is acknowledged by the examiner and the cited references have been considered in the examination of the claims now pending. As required by M.P.E.P. 609 C(2), a copy of the PTOL-1449 initialed and dated by the examiner is attached to the instant office action.

Oath/Declaration

4. The applicant's oath/declaration has been reviewed by the examiner and is found to conform to the requirements prescribed in 37 C.F.R. 1.63.

Drawings

5. The drawings submitted on 08/15/2003 are acceptable for examination purposes.

Specification

6. The disclosure is objected to because of the following informalities:

"PLC" in the title of the invention should be spelled out at its first use.

"PLC" in the abstract should be spelled out at its first use.

Appropriate correction is required.

Claim Rejections - 35 USC § 112

7. The following is a quotation of the first paragraph of 35 U.S.C. 112:

> The specification shall contain a written description of the invention, and of the manner and process of making and using it, in such full, clear, concise, and exact terms as to enable any person skilled in the art to which it pertains, or with which it is most nearly connected, to make and use the same and shall set forth the best mode contemplated by the inventor of carrying out his invention.

8. **Claim 36** is rejected under 35 U.S.C. 112, first paragraph, as failing to comply with the written description requirement. The claim(s) contains subject matter which was not described in the specification in such a way as to reasonably convey to one skilled in the relevant art that the inventor(s), at the time the application was filed, had possession of the claimed invention. A computer-readable medium in claim 36 was not described in the specification.

Claim Rejections - 35 USC § 103

9. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

> (a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negatived by the manner in which the invention was made.

10. **Claims 1-6, 10-26 and 28-36** are rejected under 35 U.S.C. 103(a) as being unpatentable over **Hyatt (US Patent No.: US 5,485,590)** in view of **Wang (US Patent No.: US 6,631,478)**.

Regarding independent claims 1, 6, 16, 21, 26, 35 and 36, Hyatt discloses a method for utilizing a memory cartridge (col.6, lines 55-59: program protocol cartridge ROM A1, A2, B1 and B2) connected to a PLC (col.1, line 8: programmable controller), the memory cartridge (col.6, lines 55-59: program protocol cartridge ROM A1, A2, B1 and B2) comprising a plurality of memory segments (col.6, lines 63-66: subdivided into sections), the method comprising a plurality of activities comprising:

However, Hyatt does not specifically teach providing a default identifying stamp for records in a data log file, a structure for the data log file stored separately from the data log file in the memory cartridge; and obtaining a request to provide the data log file.

Wang teaches providing a default identifying stamp for records in a data log file (Fig.3 and col.10, lines 31-36: data log 314), a structure for the data log file (Fig.3 and col.10, lines 31-36: data structure 310) stored separately from the data log file in the memory cartridge (Fig.3: shared memory) (Fig.3 and col.10, lines 31-36: data log 314); and obtaining a request to provide the data log file (Fig.3 and col.9, lines 42-54 and col.10, lines 8-17).

Wang further teaches locating, on the memory cartridge, a first head marker (Fig.4: heap SF 1 pointer 415) relatable to a first data log record, the first head marker (Fig.4: heap SF 1 pointer 415) indicative of a beginning memory segment for a second data log record (Fig.4: heap SF 2 pointer 417) to be written; and writing the second data log record (Fig.4: heap SF 2 pointer 417) to at least the beginning memory segment, the second data log record (Fig.4: heap SF 2 pointer 417) corresponding to a data log file structure (Fig.3 and col.10, lines 31-36: data structure 310) stored separately from on the memory cartridge (Fig.4 shared memory 330) and structurally defining, a file comprising the first data log record (Fig.4: heap SF 1 pointer 415) and the second data log record (Fig.4: heap SF 2 pointer 417) (col.14, lines 37-65).

It would have been obvious to one of ordinary skill in the art at the time the invention was made to incorporate the computer network system as taught by Wang into the programmable controller communication interface module of Hyatt in order to provide improved techniques for implementing stable storage in conventional computer systems (col.2, lines 23-25). Therefore, it would have been obvious to combine the computer network system as taught by Wang with the programmable controller communication interface module of Hyatt to obtain the invention.

Regarding claims 2-5, Wang teaches providing to the memory cartridge (such as storage device, output device, user interface device) the data log file comprising process data records comprising the identifying stamp (col.1, lines 51-65 and examiner reads devices listed in claims 3-5 as the memory cartridge. Thus, claims 3-5 are analyzed as claim 1).

Regarding claim 10, Wang teaches obtaining a request to provide the data log file (Fig.3 and col.9, lines 42-54 and col.10, lines 8-17).

Regarding claims 11-15, Wang teaches providing the data log file to the memory cartridge (such as storage device, output device, user interface device), the data log file comprising a process data record further comprising the identifying stamp (Fig.3 and col.10, lines 31-36 and examiner reads devices listed in claims 13-15 as the memory cartridge. Thus, claims 13-15 are analyzed as claim 12).

Regarding claim 17, Wang teaches responsive to an affirmative user input corresponding to a selection to erase the data log file, erasing the data log file from the memory cartridge (col.24, lines 27-36).

Regarding claim 18, Wang teaches responsive to a negative user input corresponding to a selection to erase the data log file, not erasing the data log file from the memory cartridge (col.24, lines 27-36).

Regarding claim 19, Wang teaches providing a default selection corresponding to not erasing the data log file after reading the data log file from the memory cartridge (col.24, lines 27-36).

Regarding claim 20, Wang teaches providing a default selection corresponding to erasing the data log file after reading the data log file from the memory cartridge (col.24, lines 27-36).

Regarding claim 22, Wang teaches wherein the second data log record comprises a second head marker (Fig.4 and col.14, lines 37-65).

Regarding claim 23, Wang teaches wherein said writing activity causes a second head marker to be created relatable to the second data log record (Fig.4 and col.14, lines 37-65).

Regarding claim 24, Wang teaches changing the first head marker to be a non-head marker (Fig.4 and col.14, lines 37-65).

Regarding claim 25, Wang teaches reading the second data log record (Fig.4 and col.14, lines 37-65).

Regarding claim 29, Wang teaches wherein said activity of comparing a first data log record to a second data log record takes place responsive to a loss of power to the memory cartridge (col.9, lines 7-19).

Regarding claim 30, Wang teaches wherein a first head marker relates to the first data log record (col.14, lines 37-65).

Regarding claim 31 Wang teaches determining that a first head marker relating to the first data log record was written subsequently to a second head marker relating to the second data log record; and changing the second head marker to a non-head marker (Fig.4 and col.14, lines 37-65).

Regarding claim 32, Wang teaches determining that a first head marker relating to the first data log record was written subsequently to a second head marker relating to the second data log record; and disabling the second head marker (Fig.4 and col.14, lines 37-65).

Regarding claim 33, Wang teaches comparing a position associated with the first data log record to a position associated with the second data log record with respect to a direction of writing by a circular buffer to which the first data log record and the second data log record are written; determining that a first head marker relating to the first data log record was written subsequently to a second head marker relating to the second data log record; and changing the second head marker to a non-head marker (Fig.4 and col.18, lines 43-56).

Regarding claim 34, Wang teaches comparing a time stamp associated with the first data log record to a time stamp associated with the second data log record; determining that a first head marker relating to the first data log record was written subsequently to a second head marker relating to the second data log record; and changing the second head marker to a non-head marker (Fig.4 and col.18, lines 43-56).

11. **Claims 7, 8 and 9** are rejected under 35 U.S.C. 103(a) as being unpatentable over **Hyatt (US Patent No.: US 5,485,590)** in view of **Wang (US Patent No.: US 6,631,478)** and in further view of **Gregory (US Patent No.: US 6,182,246)**.

Regarding claims 7, 8 and 9, Hyatt and Wang do not specifically teach wherein the identifying stamp relates to a date, time and device identifier.

However, Gregory teaches wherein the identifying stamp relates to a date, time and device identifier (col.10, lines 41-44).

It would have been obvious to one of ordinary skill in the art at the time the invention was made to incorporate the date and time stamp as taught by Gregory into the programmable controller communication interface module of Hyatt as modified by Wang in order to keep these accurate (col.10, line 44). Therefore, it would have been obvious to combine the date and time stamp as taught by Gregory with the programmable controller communication interface module of Hyatt as modified by Wang to obtain the invention.

12. **Claims 27 and 28** are rejected under 35 U.S.C. 103(a) as being unpatentable over **Hyatt (US Patent No.: US 5,485,590)** in view of **Wang (US Patent No.: US 6,631,478)** and in further view of **Gonia (US Patent No.: US 5,500,864)**.

Regarding claim 27, Hyatt and Wang do not specifically teach wherein the error checking technique comprises using a checksum.

However, Gonia teaches wherein the error checking technique comprises using a checksum (col.1, lines 22-45).

It would have been obvious to one of ordinary skill in the art at the time the invention was made to incorporate the error checking as taught by Gonia into the programmable controller communication interface module of Hyatt as modified by Wang in order to detect error (col.1, line 50). Therefore, it would have been obvious to combine the error checking as taught by Gonia with the programmable controller communication interface module of Hyatt as modified by Wang to obtain the invention.

Regarding claim 28, Gonia teaches wherein the error checking technique comprises using a Fletcher checksum (col.1, lines 22-45).

Conclusion

13. Claims rejected in the application

Per the instant office action, claims 1-36 have received a first action on the merits and are subject of a first action non-final.

14. Any inquiry concerning this communication should be directed to **Yong Choe** at telephone number **571-270-1053**. The examiner can normally be reached on M-F 8:00am to 5:00pm. If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, **Sanjiv Shah** can be reached on **571-272-4098**. Any inquiry of a general nature or relating to the status of this application should be directed to the TC 2100 whose telephone number is (571) 272-2100.

YC
Yong J. Choe
Examiner / Art Unit 2185

SANJIV SHAH
SUPERVISORY PATENT EXAMINER
TECHNOLOGY CENTER 2100